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TO:

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FAX NO.:

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May 10, 2005

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SUBJECT: Response and Amendment

APPLICANT:

Sergey S. Sarkisov et al

SERIAL NO.:

10/714,702

FILED:

November 17, 2003

FOR:

Bimorphic Polymeric Photomechanical Actuator

GROUP ART UNIT:

2873

CUSTOMER NO.:

23456

OUR DOCKET NO.

H8631

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RESPONSE AND AMENDMENT

VIA FACSIMILE NO. (703) 872-9306

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action mailed January 10, 2005, please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 4 of this paper.

Remarks/Arguments begin on page 24 of this paper.

light output, and is shown in an activated deformation, bending away from the fluid 81 in the fluidic pump chamber 82. This generates a lower pressure in the chamber and draws fluid 81 from the fluid inlet port into the fluidic pump chamber 83. When the illumination of the illumination surface 25 is removed, the bimorphic photomechanical sheet 89 returns to its original dimensions and exerts a compressive force against the fluid 81, thus, raising the pressure in the chamber and forcing the fluid through the fluid outlet port 84. In an alternate embodiment of the invention, the orientation of the bimorphic photomechanical sheet 89 is reversed such that the sheet bends downward into the fluid 81 when activated by the illumination of the illumination surface 25.